

Remarks

By the foregoing amendment, claims 14 and claim 30 have been amended to recite a tank comprising: a preacidification region for receiving raw materials comprising acidification bacteria wherein the pH value in the preacidification region is no greater than pH=6, a main load stage region comprising media for degrading the preacidified material while producing biogas, a light load stage region comprising media for further degrading the preacidified material while producing biogas, a sedimentation region provided with at least one discharge device, wherein the preacidification region, high load stage region, light load stage region and sedimentation region are separated by partition walls, and a gas tight sheeting which extends over the heavy load region and light load region and forms a gas reservoir, and transport means for segregating the raw material from the preacidified material and selectively transporting the preacidified material into the high load region. The amendment of the claims is supported by the original claims and paragraphs [0023], [0028], [0030] and [0037] of the specification. It is respectfully requested that this amendment be entered as it does not constitute new matter. claims 2 and 16-21 are pending in the application.

Claims 14 and 15 have been rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 2,064,529 to Fischer *et al.* More specifically, the Office Action states Fischer teaches a sewage sludge multi-digestion unit that utilizes an anaerobic process to treat the incoming waste including a primary digester tank which is capable of functioning as a preacidifier. The Office Action further states that liquid and solids can be selectively sent to a secondary tank through the use of a flow controlling means such as a valve.

Reconsideration of this rejection in view of the amended claims is respectfully requested. Amended claim 14 specifies a tank comprising a mixing and preacidification region,

a main load region and a light load region. Claim 15 depends from claim 14. Fischer *et al.* merely disclose a primary digester tank and a secondary digester tank. Thus, Fischer fails to anticipate claims 14 and 15.

Claims 14, 15, 20, 27 and 28 have been rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,958,756 to Reynell. More specifically, the Office Action states Reynell teaches a fluids digestion vessel which is a preacidifying chamber where fluid from the fluid digester contains nutrients which are transferred to the solid digestion vessel or fermenter as well as a spillway and a sieve.

Claim 20 has been cancelled in a prior amendment. This rejection as applied to amended claims 14, 15, 27 and 28 is respectfully traversed. Reynell discloses a solid digestion vessel and transporting the solid digestion vessel to a second location where a fluid digestion vessel is located. At col. 1, lines 24-31 and col. 7, lines 15-20 Reynell teaches that this arrangement is advantageous as compared to a fixed installation. Accordingly, Reynell teaches away from the claimed invention in which a preacidification region and main load region are contained in a tank. Accordingly, Reynell fails to anticipate the claimed invention.

Claims 14 and 18 have been rejected under 35 U.S.C. § 102(b) as anticipated by DE 19804007 to von Nordenskjold. More specifically, the Office Action states that von Nordenskjold discloses the anaerobic treatment of waste water that includes a basin that has an acidifying range/chamber or preacidifier that transfers the waste water to a high load range or fermenter where the anaerobic dismantling/processing of the organic content occurs. Further the Office Action states that von Nordenskjold teaches transfer of the waste water occurs via a dosing pump which draws fluid from the bottom of the chamber such that the dosing pump is capable of selectively transporting waste water, as well as aerating effluent with air or oxygen.

Moreover, the Office Action states that the basin 3 of von Nordenskjold is an acidification basin and pump 18 is capable of selectively sending material to the second chamber.

In this regard it is respectfully submitted that von Nordenskjold merely discloses that pump 18 is a metering pump. There is no disclosure in von Nordenskjold of a transport means which segregates preacidified material from raw material as in the claimed invention. Accordingly, von Nordenskjold fails to anticipate claims 14 and 18.

Claims 16, 19 and 29 have been rejected under 35 U.S.C. § 103 as obvious over DE 19804007 to von Nordenskjold in view of US Publication No. 2003/0213702 to Mann. As discussed above von Nordenskjold fails to teach or suggest transport means which segregates raw material from preacidified material. Similarly, Mann fails to teach or suggest transport means which segregates raw material from preacidified material. Accordingly, the combination of von Nordenskjold and Mann fail to render claims 16, 19 and 29 obvious.

Claim 17 has been rejected under 35 U.S.C. § 103 as obvious over Reynell in view of US Patent No. 4,919,815 to Copa *et al.* As discussed above, Reynell teaches away from the claimed apparatus in which a preacidification region, main load region and light load region are contained in a tank. Accordingly, the combination of Reynell and Copa *et al.* fail to render claim 17 obvious.

Claims 31, 34 and 35 have been rejected under 35 U.S.C. § 103 as obvious over von Nordenskjold in view of Ahn *et al.*, Water Research, Vol. 35, no. 18, pp. 4267-4276, 2001. More specifically, the Office Action states that Ahn discloses a preacidification process of treating brewery wastewater that includes a preacidification reactor and that it would be obvious to employ the preacidification step within the wastewater treatment method of von Nordenskjold. As discussed above, von Nordenskjold fails to teach or suggest transport means which segregates

raw material from preacidified material. Moreover, as set forth in paragraph [0002] of the present application there is a risk associated with the use of preacidification, *i.e.*, the presence of preacidifying agents in a fermenter is disadvantageous to the fermentation process. Accordingly, the combination of von Nordenskjold and Ahn fail to render claims 31, 34 and 35 obvious.

Claims 32 and 33 have been rejected under 35 U.S.C. § 103 as obvious over von Nordenskjold in view of Ahn *et al.*, and further in view of Copa *et al.* As discussed above, none of von Nordenskjold or Ahn *et al.*, teach or suggest transport means which segregates preacidified materials from raw material. The Office Action states that it would have been obvious to one of ordinary skill in the art to employ the steps filtering and settling as suggested by Copa within the teachings of von Nordenskjold and Ahn because the suggestion for doing so at the time would have been in order to minimize the amount of residual solids wasted during the treatment process. In this regard it is respectfully submitted that Copa *et al* teach a process and apparatus in which the residual solids which are recovered are the treating agents, not the raw material to be treated. Accordingly, the combination of von Nordenskjold, Ahn and Copa *et al.* fail to render claims 32 and 33 obvious.

Claim 30 has been rejected under 35 U.S.C. § 103 as obvious over von Nordenskjold in view of US 2005/0167359 to Wilkie. Like von Nordenskjold, Wilkie fails to teach or suggest transport means which segregates preacidified material from raw material. . Accordingly, the combination of von Nordenskjold and Wilkie fail to render claim 30 obvious.

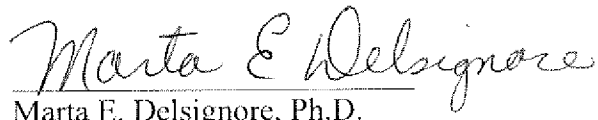
Claims 36 and 37 have been rejected under 35 U.S.C. § 103 as obvious over von Nordenskjold in view of Ahn *et al.*, and further in view of Wilkie. Like von Nordenskjold and Ahn *et al*, Wilkie fails to teach or suggest transport means which segregates preacidified material

from raw material. Accordingly, the combination of von Nordenskjold, Ahn *et al* and Wilkie fail to render claims 36 and 37 obvious.

In view of the foregoing claims 14-19, 27-37, all the pending claims, are in condition for allowance.

Prompt and favorable action is respectfully requested.

Respectfully submitted,


Marta E. Delsignore, Ph.D.
Registration No. 32,689

Goodwin Procter, LLP
The New York Times Building
620 Eighth Avenue
New York, New York 10018
(212) 813-8822